Appendix V1

Aboveground Storage Tank Management
Daily and Weekly Inspection Requirements

V1-1. Purpose. This policy is to outline and ensure compliance with the regulatory requirements for daily and weekly aboveground storage tank (AST) inspections for regulated ASTs as specified by 9 VAC 25-91-130, Pollution Prevention Requirements.

V1-2. Definitions.

a. Aboveground storage tank or AST: Any one or combination of tanks, including pipes, used to contain an accumulation of oil at atmospheric pressure, and the volume of which, including the volume of the pipes, is more than 90% above the surface of the ground.

b. Oil: Oil of any kind and in any form, including, but not limited to, petroleum, and petroleum by-products, fuel oil, lubricating oils, sludge, oil refuse, oil mixed with other wastes, crude oils, and other liquid hydrocarbons regardless of specific gravity.

c. Operator: Any person who owns, operates, charters by demise, rents, otherwise exercises control over or responsibility for an AST facility, or a vehicle, or a vessel.

d. Regulated AST: An individual AST with a storage capacity greater than 660 gallons of petroleum based product and not meeting the exemptions listed in Section 3, Exclusions.

e. Storage Capacity: The total capacity of an AST or a container, whether filled in whole or in part with oil, a mixture of oil, or mixtures of oil with nonhazardous substances, or empty.

f. Vehicles: Any motor vehicle, rolling stock, or other artificial contrivance for transport whether self-propelled or otherwise, except vessels.

g. Vessels: Every description of watercraft or other contrivance used as a means of transporting on water, whether self-propelled or other, and shall include barges and tugs.

V1-3. EXCLUSIONS.

a. The following items are exempted from this policy brief:

(1) Vessels;

(2) Licensed motor vehicles, unless used solely for the storage of oil;

(3) An AST with a storage capacity of 660 gallons or less of oil;

(4) A wastewater treatment tank system that is part of a wastewater treatment facility regulated under sections 402 or 307 (b) of the Federal Clean Water Act (33 USC section 1251 et seq.);

(5) An AST used for the storage of products that are regulated pursuant to the Federal Food, Drug, and Cosmetic Act (21 USC Section 301 et seq);

(6) An AST that is used to store hazardous wastes listed or identified under Subtitle C of the Resource Conservation and Recovery Act (RCRA) (Solid Waste Disposal Act) (42 USC Section 6901 et seq.), or a mixture of such hazardous wastes and other regulated substances;

(7) An AST that is used to store propane gas, butane gas or other liquid petroleum gases;

(8) An AST used to store nonpetroleum hydrocarbon-based animal or vegetable oils;

(9) A surface impoundment, pit, pond, or lagoon;

(10) A stormwater or wastewater collection system;

(11) Equipment or machinery that contains oil for operational purposes, including but not limited to lubricating systems, hydraulic systems, and heat transfer systems;

(12) An AST used to contain oil for less than 120 days when (i) used in connection with activities related to the containment and cleanup of oil; (ii) used by a federal, state or local entity in responding to an emergency; or (iii.) used temporarily on-site to replace permanent capacity storage;

(13) Oil filled electrical equipment, including, but not limited to, transformers, circuit breakers or capacitors;

(14) A flow-through process tank;

(15) Oily water separators;

(16) An AST containing dredge spoils;

(17) Piping or piping beyond the first valve from the AST that connects an AST with production process tanks or production process equipment.

(18) An AST with a capacity of 5,000 gallons or less used for storing heating oil for consumptive use on the premises where stored.

b. The provisions of Policy Brief Number 200-6, Hazardous Substance Discharge/Integrated Contingency Plan dated 23 April 2001 and USATC Integrated Contingency Plan applies to paragraphs 3.(1) through 3.(18).

V1-4. Procedures.

a. The operator as defined can be more than one person and each operator shares joint responsibility for compliance.

b. The operator, or a duly authorized representative, shall conduct a **daily** visual inspection of the AST as outline in section g. below. Daily inspections shall be conducted during normal duty hours. If the primary inspector is sick or on leave does not preclude the inspection being conducted. The activity should appoint someone to perform the daily/weekly inspections during the primary inspector's absence.

c. The person conducting the daily inspection shall document completion of the inspection by initialing the Visual Daily Aboveground Storage Tank Inspection Record at the appropriate date (See Visual Daily Inspection Report at the end of this Appendix).

d. Each operator of an AST shall institute inventory control procedures capable of detecting a significant variation of inventory. A significant variation shall be considered a variation in excess of 1% of the storage capacity of each individual AST. The following ASTs are exempt from inventory control procedures:

(1) AST totally off the ground with all associated piping off the ground.

(2) AST with a capacity of 5,000 gallons or less located within a building or structure designed to fully contain a discharge of oil.

(3) Below is a list of regulated ASTs at Fort Eustis and Fort Story and denotes those ASTs which require inventory control and testing for significant variation.

Fort Eustis
Aboveground Storage Tank Inventory

	Building	Size (gallons)	Regulated AST	Contents	Description
1	451	20,000	yes	Used Oil	Bilge Water System
2	460	1,000	yes	Diesel	Diesel Engine Training
3	705	1,000	yes	Diesel	Generator
4	2116	4,000	yes	No. 2 Fuel Oil	Tanks Direct Fire Guard tanks
5	2116	4,000	yes	No. 2 Fuel Oil	Tanks Direct Fire Guard tanks
6	2451	30,000	yes	JP8	Felker Tank Farm
7	2451	30,000	yes	JP8	Felker Tank Farm
8	2702	1,000	yes	Used Oil	Convault
9	3307	1,000	yes	JP8	Convault

Fort Story
Aboveground Storage Tank Inventory

	Building	Size (gallons)	Regulated AST	Contents	Description
1	765	3,000	yes	Diesel	Peak Shaving Generator

e. Each secondary containment dike or berm shall be maintained.

f. Each operator shall institute safe fill, shutdown, and transfer procedures or equivalent measures that will ensure that spills resulting from tank overfills or other product transfer operations do not occur.

g. All activities of Fort Eustis and Fort Story, to include tenant activities, are required to comply with Policy Brief Number 200-6, Hazardous Substance Discharge/Integrated Contingency Plan and the USATC Integrated Contingency Plan (ICP). Tenants and activities are responsible for using best management practices to prevent discharges. Best management practices are measures to prevent spills and leaks, and control migration of discharges. This includes (but not limited to) use of secondary containment placed around or underneath potential sources of releases and protection of drains and other water sources.

(1) The AST facility operator is responsible for a spill (or anyone observing a spill incident) must contact Fire & Emergency Services immediately at 911 or 878-1008 (Fort Eustis) and 911 or 422-7456 (Fort Story), regardless of quantity discharged. Fire & Emergency Services is the only authorized agent to report incidents to federal, state and local authorities.

(2) All AST facility operator activities will provide support to spill response actions IAW the ICP.

(3) All AST facility operators shall ensure appropriate spill kits are on hand at all petroleum storage locations.

h. The visual daily inspection shall include the following:

(1) A complete walk through of the facility property in the areas where the AST is staged to ensure that no hazardous conditions exist.

(2) An inspection of the ground surface for signs of leakage, spillage, or stained or discolored soils.

(3) A check of the berm or dike area for excessive accumulation of water and to ensure the dike or berm manual drain valves are secured.

(4) A visual inspection of the exterior tank shell to look for signs of leakage or damage.

(5) An evaluation of the condition of the AST and appurtenances.

i. The operator or duly authorized representative shall conduct a **weekly** inspection of the facility using the Weekly AST Inspection Record (See Weekly AST Inspection Report at the end of this Appendix).

(1) The Weekly AST Inspection Record shall be maintained at the facility and provided to the Environmental and Natural Resources Division AST Program Manager upon request.

(2) The Weekly AST Inspection Record shall be initialed and dated by the AST facility operator or person conducting the inspection. The Weekly AST Inspection Record shall become part of the AST facility record.

(3) The weekly inspections shall include the following:

(a) Containment dike or berm is in satisfactory condition.
(b) Containment area is free of excess standing water or oil.
(c) Gate valve used for emptying containment area is secured.
(d) Containment area/base of tank is free of high grass, weeds, and debris.
(e) Tank shell surface, including any peeling areas, welds, rivets/bolts, seams, and foundation, visually inspected for areas of rust and other deterioration.
(f) Ground surface around tanks and containment structures and transfer areas checked for signs of leakage.
(g) Leak detection equipment in satisfactory condition.
(h) Separator or drainage tank in satisfactory condition.
(i) Tank water bottom draw offs not in use are secured.
(j) Tank fill valves not in use are secured.
(k) Valves inspected for signs of leakage or deterioration.
(l) Inlet and outlet piping and flanges inspected for leakage.
(m) All tank gauges have been inspected and are operational.

j. The AST Inspection Discrepancy Report (See AST Inspection Discrepancy Report at the end of this Appendix) shall be used to annotate discrepancies noted during the daily and weekly inspections. A copy of the discrepancy report shall be provided to the ENRD AST Program Manager within two working days.

V1-5. Training. Personnel conducting daily and weekly inspections shall be properly trained. The ENRD AST Program Manager shall establish a training program. The training program established shall be maintained to reflect current conditions of the facility. Personnel who will be conducting the inspections shall receive the training prior to conducting any inspections.

a. Training for personnel performing daily and weekly inspections shall address at a minimum:

(1) Basic information regarding occupational safety, hazard recognition, personnel protection, and facility operations.

(2) The procedure to be followed in conducting the daily visual and weekly AST inspections.

(3) The procedure to be followed upon recognition of a hazard or the potential for a hazard.

(4) The procedure for evaluating the condition of the AST and appurtenances.

b. The ENRD AST Program Manager shall train AST facility personnel on any changes to the contents of the initial training program or every three years and document this training in the facility records.

c. As with any new process or procedure, a commitment to effect change and strong command support are essential to its success. Commanders and directors must play an active role in assuring compliance with this policy.

V1-6. Recordkeeping and Access to AST Facilities.

a. Each operator of an AST facility subject to this policy brief shall maintain the following records:

(1) All records relating to all required measurements and inventory.

(2) All records relating to required tank/pipe testing;

(3) All records relating to spill events and other discharges of oil from the facility; to include inspection discrepancy report (See AST Inspection Discrepancy Report at the end of this Appendix).

(4) All supporting documentation for developed contingency plans;

(5) All records relating to training of individuals; and

(6) These records shall be kept by the AST operator of a facility at the facility and provide the ENRD AST Program Manager a copy of the records at the end of each calendar year. Submit the previous year records to the ENRD AST Program Manager by the second week in January in the new calendar year, i.e., January 10, 2002. The records shall be kept for a period of no less than five years unless otherwise indicated.

(7) Upon request each operator shall make these records available to the Virginia Department of Environmental Quality (VDEQ), and to the director or coordinator of emergency services for the locality in which the AST facility is located or to any political subdivision within one mile of the facility may request to see AST records. ENRD will coordinate with each facility operator and provide the requested records.

b. Operator shall maintain all records relating to compliance with this chapter for a period of no less than five years from the date the board receives notice of the closure unless otherwise indicated. These records shall be made available to the VDEQ at any time upon request.

V1-7. References: Virginia Department of Environmental Quality, Water Division, Office of Spill Response and Remediation regulation 9 VAC 25-91-10 et seq, Facility and Aboveground Storage Tank (AST) Regulation, Policy Brief Number 200-6, Hazardous Substances Discharges/Integrated Contingency Plan and USATC Integrated Contingency Plan (ICP).

VISUAL DAILY ABOVEGROUND STORAGE TANK (AST) INSPECTION RECORD

Activity: _____ **Building:** _____ **Tank #:** _____

Inspector's Name: _____ **Year:** _____

The AST Inspector must put his/her initial in the appropriate box indicating completion of inspection.

Day of Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
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1. A complete walk-through of the facility property in the area of the aboveground storage tank (AST) to ensure that no hazardous conditions exist.
2. An inspection of the ground surface for signs of leakage, spillage, or stained or discolored soils.
3. Check the berm or dike area for excessive accumulation of water and to ensure the dike or berm manual drain valves are secured.
4. Perform a visual inspection of the exterior tank shell to look for signs of leakage or damage.
5. An evaluation of the condition of the AST and the tank's associated equipment
6. If a discrepancy is noted during the daily inspection check, complete the AST Discrepancy Report and contact the Environmental and Natural Division, DPW at 878-4123.

WEEKLY ABOVEGROUND STORAGE TANK (AST) INSPECTION RECORD

Activity: _____ **Building:** _____ **Tank #:** _____

Inspector's Name: _____ **Year:** _____

The AST Inspector must put his/her initial in the appropriate box indicating completion of inspection.

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1. Containment dike or berm in satisfactory condition.
2. Containment area free of excess standing water or oil.
3. Gate valves used for emptying containment areas secured.
4. Containment area/base of tank free of high grass, weeds, and debris
5. Tank shell surface visually inspected for areas of rust and other deterioration.
6. Ground surface around tanks and containment structures and transfer areas checked for signs of leakage.
7. Leak detection equipment in satisfactory condition.
8. Separator or drainage tank in satisfactory condition.
9. Tank water bottom draw offs not in use are secured.
10. Tank fill valves not in use are secured.
11. Valves inspected for signs of leakage or deterioration.
12. Inlet and outlet piping and flanges inspected for leakage.
13. All tank gauges have been inspected and are operational.

Aboveground Storage Tank
Inspection Discrepancy Report

Date: _____

Activity: _____

Building: _____ **Tank:** _____

Discrepancy:

Corrective Action: